

Column

The United States role in the international live reptile trade

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Abstract.—In the 1990's, the trade in live reptiles has grown substantially, and the United States (U.S.) is the world's most significant player in the international trade in live reptiles, both as an importer of exotic species, and as an exporter of native and exotic species. In 1995, more than 2.5 million reptiles were imported into the U.S., primarily to supply the pet trade. In 1996, over 9.5 million reptiles were exported or reexported from the U.S., primarily to Europe and Asia, to supply the demand for reptiles as pets and food. Despite the large and apparently growing number of reptiles and amphibians in trade, we have yet to quantify the impacts of this trade on the conservation of these species in the wild.

Key words. *Herpetofauna, import, export, reexport, live reptile, international trade*

By way of introduction, I would like to give you some background information about myself, TRAFFIC, and this new column in *Amphibian and Reptile Conservation* titled, *Herpetofauna and Humanity*. Presently, I am a Senior Program Officer for TRAFFIC North America. As a Senior Program Officer, I am responsible for the development and oversight of wildlife trade studies and the implementation of their findings and recommendations. TRAFFIC North America is a part of the worldwide TRAFFIC Network, a program of World Wildlife Fund (WWF) and The World Conservation Union (IUCN). TRAFFIC is the world's largest wildlife trade monitoring program with 21 offices covering most regions of the globe. TRAFFIC produces reports and papers documenting the findings of its studies and recommending measures necessary to help ensure that the trade in wildlife and wildlife products are conducted in a sustainable and legal manner. This work is done by collecting trade data via government agencies such as the United States Fish and Wildlife Service (USFWS), customs agencies, and international bodies, carrying out market surveys, conducting literature reviews and website searches, and other means. In the three years that I have been with TRAFFIC, much of my time has been devoted to investigating various aspects of reptile and amphibian trade.

Prior to coming to TRAFFIC North America, I was a wildlife inspector for the USFWS in Los Angeles, where for over four years I was able to see firsthand the scope of the trade in reptiles and amphibians. Equally important, I gained valuable knowledge of the laws that govern the trade, and the means by which these laws are implemented and enforced in the United States (U.S.).

This background, along with an education in natural resources and law, will influence the areas to be covered in this column. Among the subjects I intend to tackle in this space are reptile and amphibian trade and its implications for conservation; the use of reptiles and amphibians as clothing, food and medicine; the enactment, implementation and effectiveness of wildlife trade laws; illegal trade and the threat posed to reptiles and amphibians in the wild; captive breeding and the private breeder's role in conservation; and the current events that shape the relationship between herpetofauna and humankind. As an

introduction to this new column, *Herpetofauna and Humanity*, it would be useful to provide an overview of the U.S. role in the international live reptile trade. The following information summarizes a report released by TRAFFIC in August, 1998, entitled *The U.S. Role in the International Live Reptile Trade: Amazon tree boas to Zulu-land dwarf chameleons* (Hoover 1998).

The international trade in live reptiles has grown dramatically in the last decade. The import, export, and reexport of live reptiles sup-

plies a number of markets, including zoos and aquariums, breeding facilities, research centers, private breeders and keepers, and even food markets in some segments of society. By far the most significant market for the live reptile trade is the pet market (private breeders and keepers of amphibians and reptiles).

The causes of the substantial rise in the international trade in live reptiles are difficult to quantify but may include an increase in the availability and variety of species; improved reptile husbandry practices due to advances in technology and scientific knowledge; increased restrictions on other wildlife trade; changing lifestyles that make reptiles more suitable pets than other fauna; or simply an increased popularity that has made reptiles today's fashionable pets. Whatever the reason, and there may be some truth to all of these explanations, there can be no denying that the live reptile industry has expanded dramatically.



Ball python (*Python regius*). Photo: World Wildlife Fund.

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In 1970, prior to the passage of laws such as the U.S. Endangered Species Act and adoption of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), U.S. imports of live reptiles approached 2 million animals. Nearly 80 percent of this import volume consisted of turtles, primarily red-eared slider turtles (*Trachemys scripta elegans*), with 12 percent lizards, 6.5 percent crocodilians, and less than 2 percent snakes (Busack 1974).

Based on analysis of USFWS trade data for a number of reptile species, it is clear that the trade subsequently declined significantly and remained relatively low throughout the 1980s. However, imports increased again in the early 1990s, and in 1995 more than 2.5 million live reptiles were imported to the U.S. Yet the content of this trade differed significantly from the reptiles imported in 1970. By far the most commonly imported species was the green iguana (*Iguana iguana*), which made up more than 45 percent of the total trade in 1995, and only 8 percent of imports in 1970. Snakes and lizards played a far more significant role in current import levels than they did in 1970, with 1995 turtle volumes greatly reduced and crocodilian imports virtually nonexistent. In fact, the dramatic increase in the total number of live reptiles imported is primarily due to fluctuations in the number of iguanas imported.

However, the U.S. is not only a consumer in the international live reptile trade, but also a significant supplier. In fact, the U.S. presently exports or reexports more live reptiles than it imports, due largely to the export of farm-raised hatchling red-eared slider turtles, a species even more influential on overall trade volumes than the iguana. For example, in 1996, the U.S. exported or reexported over 9.5 million reptiles, primarily to Europe, East and Southeast Asia, yet over 88 percent of this trade consisted of the red-eared slider, at a volume of nearly 8.4 million animals.

Setting aside the voluminous trade in red-eared sliders, there are more than one million reptiles of other species that are exported or reexported from the U.S. The North American taxa nearest to the red-eared slider in export volume are the map turtles (*Graptemys* spp.). According to USFWS data, map turtle exports have risen from less than 10,000 in 1990 to over 80,000 in both 1995 and 1996. Based on map turtle export data, just two of the twelve map turtle species make up 90 to 95 percent of the export trade: the common map turtle (*G. geographica*) and the false map turtle (*G. pseudogeographica*) [Ventura 1997; data provided by Weissgold 1997].

The U.S. also plays a substantial and apparently expanding role as an exporter of previously imported reptiles. For example, the U.S. reexported less than 60,000 iguanas in 1993 and more than 270,000 imported iguanas in 1996. This role as a supplier of previously imported reptiles is influenced by a number of factors. Perhaps foremost is geography; for instance, U.S. dealers are well positioned to supply Asia and Europe with Latin American reptiles. Another significant factor may be that U.S. dealers have long-established connections with overseas suppliers that may provide a competitive advantage as new markets arise. For example, most of the live reptile trade in Canada, where the trade in reptiles is less established, appears to be supplied by U.S. traders (Chatel 1998).

U.S. trade in live reptiles also appears to make up a substantial portion of the world trade in live reptiles. A comparison of trade data for certain CITES-listed species indicates that U.S. trade constituted approximately 28 per-

cent of the total world trade in 1983, but constituted more than 82 percent of the world trade by 1992. However, these numbers may be artificially high given the failure of many countries to accurately report such trade.

There appears to have been an increase in illegal as well as legal trade. Based on a review of press releases, wildlife trade journals, and other sources, from 1970 to 1990 there were only 11 reported investigations of international live reptile smuggling, while from 1991 to 1997 there were at least 23 such cases reported. However, there are a number of alternative explanations to these results, including increased enforcement effort and better reporting of prosecutions.

Of course, all of this information on the growth in the reptile trade raises the all-important "so what" question. The overview study that TRAFFIC conducted was not meant to answer that question, but to identify areas that needed further examination so that, in some respects, the "so what" question could be addressed. That, in large part, will be the role of this column as well. In future issues, we will look at several "so what" questions, such as:

What impact does the pet trade have on wild populations of reptiles and amphibians?

What is being done to monitor and protect native species found in trade?

What other forms of reptile and amphibian trade may be threatening species around the world, such as the skin, food, and medicine trades?

What is the impact of commercial captive breeding, farming, and ranching operations for iguanas, turtles, ball pythons, and other species on wild populations of reptiles and amphibians?

What is the threat posed by exotic species introductions that can occur with international trade, such as the red-eared slider turtle in Europe?

What is being done to more effectively enforce existing laws and regulations to ensure that trade is not detrimentally affecting wild reptiles and amphibians?

The U.S. is clearly the world's largest consumer of live reptiles for the pet trade, as well as a significant supplier and intermediary. Yet, this is only one piece of the puzzle. The growth in popularity of reptiles and amphibians as pets, along with the continued enormous demand for these species for skins, meat, and medicine, present us with a broad array of subjects for discussion and debate. In coming issues, we will explore these fascinating topics in an effort to gain a better understanding of the dynamic and complex relationship between herpetofauna and humanity.

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The background screen photo: red-eared slider turtles (*Trachemys scripta elegans*). Photo: Wil Luijff.